

EXHIBIT 112

Profiting from Non-Guaranteed Advertising: The Value of Dynamic Allocation & Auction Pricing for Online Publishers

Table of Contents

Overview.....2

How Publishers Segment and Sell Ad Inventory Today.....2

Dynamic Allocation.....2

Research and Conclusion4





Profiting from Non-Guaranteed Advertising

The Value of Dynamic Allocation & Auction Pricing for Online Publishers

Overview

For most large online publishers, the supply of available ad inventory far exceeds demand for it. A research study conducted by Forrester indicated that as much as 25% of sellers' inventory goes unsold.¹ To tap additional demand from advertisers, brand-conscious publishers often sell through indirect channels, including ad networks, exchanges, and other technology providers that vary widely in scale, technology, ease of use, cost, and controls.

Ad networks provide revenue to publishers willing to commit, in advance, a large number of impressions at a fixed CPM value. Many publishers find comfort in the predictable revenues of this type of booking. Can publishers make more money by embracing a spot auction sales model — with DoubleClick's proprietary Dynamic Allocation technology — to increase their CPM as a component of their yield management strategy, instead of relying exclusively on fixed, upfront, pre-allocated sales?

How Publishers Segment and Sell Ad Inventory Today

With a typical third-party ad server, publishers categorize ad inventory in order of self-defined value. This priority tiering system is used to manage the delivery of ads (of different varieties, formats, messaging, etc.) into ad space on any given page.

Through their direct sales channel, most publishers sell their highest-value ad space to the highest-paying advertisers — usually brand-conscious or endemic marketers — on a guaranteed basis. A typical large publisher generates upward of 80% of its online advertising revenue from guaranteed ad sales.²

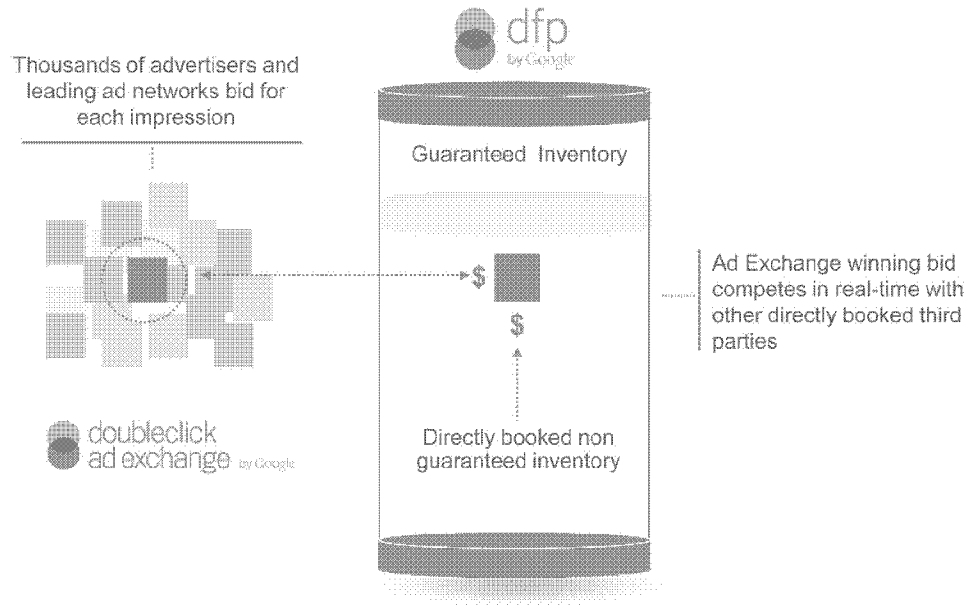
Publishers usually sell their remaining ad space on a non-guaranteed (or “pre-emptible”) basis through their direct sales channel, as well through their indirect sales channel, which may comprise a handful of ad network partners. Some publishers manage yield across this ad space by manually prioritizing which ad networks access it in order of their relative average CPM payout. Because the rank order of networks' average CPMs changes continually, this manual process is time consuming, and often results in lost impressions (typically 5% to 10% of a publisher's total non-guaranteed ads).³

Dynamic Allocation

When publishers sell display advertising through their direct sales force on a guaranteed basis, that inventory must be delivered systematically to achieve the desired impression goals set forth in an insertion order (or “I/O”). Non-guaranteed ads, on the other hand, typically sell at a lower price because of the potential that another buyer will pay a higher price after the initial sale, before the impression is actually delivered; hence the “non-guaranteed” status. With indirect sales, the CPM is usually fixed, but the number of impressions delivered is not.

Ad servers like DFP have some variability in how they meet impression delivery goals, rotating other ads sold by the direct sales force on a non-guaranteed basis into a particular ad slot in order to maintain a steady rate of delivery for the guaranteed ads. Instead of randomly rotating other ads into an ad slot, DoubleClick Ad Exchange uses Dynamic Allocation, rotating in higher-paying ads from ad networks and other third-party media buyers when the net CPM they provide to the publisher is higher than what has been booked directly into the ad server.

Dynamic Allocation: Proprietary ad server integration designed to maximize revenue

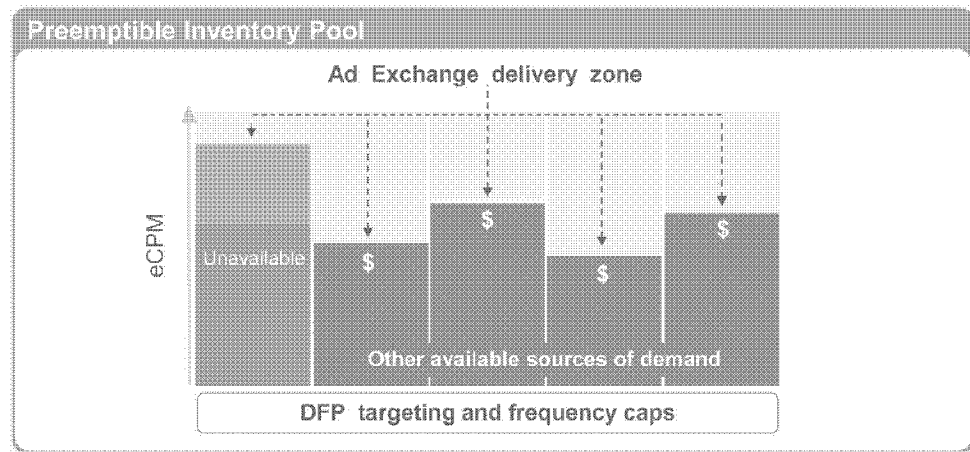


Dynamic allocation passes to the Ad Exchange the CPM value associated with the ad that the primary ad server has selected and is about to serve. The technology then uses this CPM value as the minimum CPM for the auction. If the Ad Exchange can provide the publisher with a net CPM value higher than they would have gotten from delivering their directly booked, non-guaranteed ad, the Ad Exchange will deliver an ad. If, however, the directly booked ad's CPM value is higher, it ignores any bids coming in from the Ad Exchange. As a result of this ad server integration, publishers essentially have a risk-free way to get the highest yield for every non-guaranteed impression they sell through their direct and indirect sales channels. An additional benefit of Dynamic Allocation is that it ensures there is a deep pool of ads to deliver for any given piece of inventory, reducing the probability that the publisher delivers a house or zero-value ad.

Combined with Dynamic Allocation, DoubleClick Ad Exchange's real-time auction mechanism enables publishers to receive the highest yield across all participating buyers for any given ad impression. An approach employed by some third-party technology providers, by contrast, estimates and computes *a priori* the expected CPM from a given buyer. These systems use average, historical CPM values to predict the price that a given buyer will pay, then use that predicted value to call the ad network with the highest projected CPM.

The use of average CPMs has drawbacks: When the technology estimates the CPM to be higher than the CPM actually paid for a given impression or targeting set, the publisher loses the difference between that value and what another network would have paid. And when the technology estimates the CPM to be lower than the CPM actually paid, the ad network may not be called when it would have delivered the highest-yielding ad. These inefficiencies reduce the potential yield that a publisher can achieve.

Dynamic Allocation eliminates opportunity cost



Research and Conclusion

In a recent study (Q1, 2010), we compared the average effective CPM from the Ad Exchange with aggregate directly booked inventory sold through in DFP. The results of our research demonstrated that the combined effects of auction pressure and Dynamic Allocation in DoubleClick Ad Exchange resulted in an average CPM lift of 136% compared with fixed, upfront, pre-negotiated sales of non-guaranteed inventory. Applying the research findings, a publisher that generates an average CPM of \$0.65 for its non-guaranteed ad inventory might expect to see \$1.53 by taking advantage of the Ad Exchange.

The results of our research demonstrated that the combined effects of auction pressure and Dynamic Allocation in DoubleClick Ad Exchange resulted in an average CPM lift of 136% compared with fixed, upfront, pre-negotiated sales of non-guaranteed inventory.

Our study was conducted using the first-generation version of DoubleClick Ad Exchange. However, the key takeaway — that over time, Dynamic Allocation and auction pricing can provide incrementally higher yield over fixed upfront sales for non-guaranteed display advertising — is consistent across both versions of the system, assuming that similar supply-demand characteristics apply. We anticipate that with the currently available next-generation DoubleClick Ad Exchange, publishers will also benefit from greater upward pricing pressure created by the introduction of AdWords and Google Display Network buyers coming online, and as more large ad networks and third-party technology providers purchase large blocks of inventory through the service's new API and real-time bidding technologies.



1. "Online Ad Exchange," Forrester Custom Research prepared for DoubleClick, March 2007.
2. "Online Ad Exchange," Forrester Custom Research prepared for DoubleClick, March 2007.
3. Source: Google internal data.

© 2010 Google Inc. All rights reserved. Google, DoubleClick, the Google logo, and the DoubleClick logo are trademarks of Google Inc. All other company and product names may be trademarks of the respective companies with which they are associated.
100712_2770313